

## SUMMARY OF WATER CONDITIONS

MARCH 1, 1999

February turned out to be the most productive month of this water year so far. Precipitation and snowpack accumulation were much above average in northern California. In a classic example of the La Niña weather pattern, southern California remained quite dry. About one quarter of the rainy season is left; major changes in the water supply outlook are still possible, but are not likely. Most areas of the State should have average or better water supplies this year.

**Forecasts** of April through July runoff are now above average, except for the southern Sierra due to the pronounced decrease of rain and snow in that region. Water year runoff forecast percentages have the same wetter north, dry south pattern with the statewide average of 115 percent swelled by larger amounts in the wetter north.

**Snowpack** water content is 125 percent of average for this date and 110 percent of the April 1 average, which is the date of maximum accumulation. By region, the pack ranges from 145 percent in the Sacramento River region to 70 percent in Tulare Lake region. Last year the statewide snowpack stood at 185 percent.

**Precipitation** during February was approximately 150 percent of average for the month, ranging from over 200 percent on the north coast to about 30 percent in the southeastern regions. Seasonal precipitation since October 1 is now about average statewide. Last year we had 170 percent at this time.

**Runoff** so far this season is about 115 percent of average compared to 160 percent one year ago. February statewide runoff was about 160 percent of average. Estimated runoff of the eight major rivers of the Sacramento and San Joaquin River regions was 4.6 million acre–feet.

**Reservoir storage** remains excellent at around 120 percent of average overall, about the same as one year ago. Amounts of water in storage gained only slightly due to flood control limits in many major reservoirs.

### SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

| HYDROLOGIC REGION         | PRECIPITATION<br>OCTOBER 1 TO<br>DATE | MARCH 1 SNOW<br>WATER CONTENT | MARCH 1<br>RESERVOIR<br>STORAGE | RUNOFF<br>OCTOBER 1 TO<br>DATE | APR–JULY RUNOFF<br>FORECAST | WATER YEAR<br>RUNOFF<br>FORECAST |
|---------------------------|---------------------------------------|-------------------------------|---------------------------------|--------------------------------|-----------------------------|----------------------------------|
| NORTH COAST               | 125                                   | 140                           | 110                             | 110                            | 130                         | 115                              |
| SAN FRANCISCO BAY         | 100                                   | ---                           | 120                             | 110                            | ---                         | ---                              |
| CENTRAL COAST             | 75                                    | ---                           | 130                             | 45                             | ---                         | ---                              |
| SOUTH COAST               | 45                                    | ---                           | 120                             | 50                             | ---                         | ---                              |
| SACRAMENTO RIVER          | 115                                   | 145                           | 110                             | 120                            | 125                         | 125                              |
| SAN JOAQUIN RIVER         | 100                                   | 125                           | 130                             | 120                            | 110                         | 110                              |
| TULARE LAKE               | 80                                    | 70                            | 140                             | 95                             | 70                          | 75                               |
| NORTH LAHONTAN            | 120                                   | 140                           | 155                             | 100                            | 130                         | 120                              |
| SOUTH LAHONTAN            | 30                                    | 95                            | 100                             | 115                            | 100                         | 105                              |
| COLORADO RIVER–<br>DESERT | 30                                    | ---                           | ---                             | ---                            | ---                         | ---                              |
| <b>STATEWIDE</b>          | 100                                   | 125                           | 120                             | 115                            | 115                         | 115                              |

**MARCH 1, 1999 FORECASTS**  
**APRIL-JULY UNIMPAIRED RUNOFF**

| HYDROLOGIC REGION<br>and Watershed                        | Unimpaired Runoff in 1,000 Acre-Feet (1) |                     |                     |                      |                  |                                  |
|---|--|---------------------|---------------------|----------------------|------------------|----------------------------------|
|   | HISTORICAL                               |                     |                     | FORECAST             |                  |                                  |
|   | 50 Yr<br>Avg<br>(2)                      | Max<br>of<br>Record | Min<br>of<br>Record | Apr-Jul<br>Forecasts | Pct<br>of<br>Avg | 80 %<br>Probability<br>Range (1) |
| <b>SACRAMENTO RIVER</b>                                   |  |                     |                     |                      |                  |                                  |
| <b>Upper Sacramento River</b>                             |  |                     |                     |                      |                  |                                  |
| Sacramento River at Shasta Lake (3)                       | 297                                      | 702                 | 39                  | 370                  | 125%             |                                  |
| McCloud River at Shasta Lake                              | 392                                      | 850                 | 185                 | 480                  | 122%             |                                  |
| Pit River at Shasta Lake                                  | 1,056                                    | 2,203               | 480                 | 1,470                | 139%             |                                  |
| Total Inflow to Shasta Lake                               | 1,801                                    | 3,525               | 726                 | <b>2,380</b>         | 132%             | 1,880 - 3,160                    |
| <b>Sacramento River above Bend Bridge, near Red Bluff</b> | 2,451                                    | 5,075               | 943                 | <b>3,100</b>         | 126%             | 2,380 - 4,260                    |
| <b>Feather River</b>                                      |  |                     |                     |                      |                  |                                  |
| Feather River at Lake Almanor near Prattville (3)         | 333                                      | 675                 | 120                 | 390                  | 117%             |                                  |
| North Fork at Pulga (3)                                   | 1,028                                    | 2,416               | 243                 | 1,210                | 118%             |                                  |
| Middle Fork near Clio (4)                                 | 86                                       | 518                 | 4                   | 105                  | 122%             |                                  |
| South Fork at Ponderosa Dam (3)                           | 110                                      | 267                 | 13                  | 135                  | 123%             |                                  |
| Total Inflow to Oroville Reservoir                        | 1,831                                    | 4,676               | 392                 | <b>2,240</b>         | 122%             | 1,740 - 3,200                    |
| <b>Yuba River</b>   |  |                     |                     |                      |                  |                                  |
| North Yuba below Goodyears Bar (3)                        | 286                                      | 647                 | 51                  | 360                  | 126%             |                                  |
| Inflow to Jackson Mdws and Bowman Reservoirs (3)          | 112                                      | 236                 | 25                  | 140                  | 125%             |                                  |
| South Yuba at Langs Crossing (3)                          | 233                                      | 481                 | 57                  | 300                  | 129%             |                                  |
| Yuba River at Smartville                                  | 1,029                                    | 2,424               | 200                 | <b>1,320</b>         | 128%             | 1,000 - 1,870                    |
| <b>American River</b>                                     |  |                     |                     |                      |                  |                                  |
| North Fork at North Fork Dam (3)                          | 262                                      | 716                 | 43                  | 350                  | 134%             |                                  |
| Middle Fork near Auburn (3)                               | 522                                      | 1,406               | 100                 | 710                  | 136%             |                                  |
| Silver Creek Below Camino Diversion Dam (3)               | 173                                      | 386                 | 37                  | 240                  | 139%             |                                  |
| Total Inflow to Folsom Reservoir                          | 1,261                                    | 3,074               | 229                 | <b>1,720</b>         | 136%             | 1,300 - 2,430                    |
| <b>SAN JOAQUIN RIVER</b>                                  |  |                     |                     |                      |                  |                                  |
| <b>Cosumnes River at Michigan Bar</b>                     | 128                                      | 363                 | 8                   | <b>140</b>           | 109%             | 90 - 240                         |
| <b>Mokelumne River</b>                                    |  |                     |                     |                      |                  |                                  |
| North Fork near West Point (5)                            | 437                                      | 829                 | 104                 | 530                  | 121%             |                                  |
| Total Inflow to Pardee Reservoir                          | 459                                      | 1,065               | 102                 | <b>580</b>           | 126%             | 450 - 800                        |
| <b>Stanislaus River</b>                                   |  |                     |                     |                      |                  |                                  |
| Middle Fork below Beardsley Dam (3)                       | 334                                      | 702                 | 64                  | 400                  | 120%             |                                  |
| North Fork Inflow to McKays Point Dam (3)                 | 224                                      | 503                 | 34                  | 280                  | 125%             |                                  |
| Total Inflow to New Melones Reservoir                     | 699                                      | 1,710               | 116                 | <b>850</b>           | 122%             | 650 - 1,170                      |
| <b>Tuolumne River</b>                                     |  |                     |                     |                      |                  |                                  |
| Cherry Creek & Eleanor Creek near Hetch Hetchy (3)        | 322                                      | 727                 | 97                  | 350                  | 109%             |                                  |
| Tuolumne River near Hetch Hetchy (3)                      | 606                                      | 1,392               | 153                 | 680                  | 112%             |                                  |
| Total Inflow to Don Pedro Reservoir                       | 1,184                                    | 2,682               | 301                 | <b>1,360</b>         | 115%             | 1,070 - 1,850                    |
| <b>Merced River</b>                                       |  |                     |                     |                      |                  |                                  |
| Merced River at Pohono Bridge (3)                         | 362                                      | 888                 | 80                  | 370                  | 102%             |                                  |
| Total Inflow to Lake McClure                              | 611                                      | 1,587               | 123                 | <b>630</b>           | 103%             | 480 - 930                        |
| <b>San Joaquin River</b>                                  |  |                     |                     |                      |                  |                                  |
| San Joaquin River at Mammoth Pool (6)                     | 1,014                                    | 2,279               | 235                 | 860                  | 85%              |                                  |
| Big Creek below Huntington Lake (6)                       | 95                                       | 264                 | 11                  | 80                   | 84%              |                                  |
| South Fork near Florence Lake (6)                         | 202                                      | 511                 | 58                  | 170                  | 84%              |                                  |
| Total Inflow to Millerton Lake                            | 1,212                                    | 3,355               | 262                 | <b>1,060</b>         | 87%              | 740 - 1,580                      |
| <b>TULARE LAKE</b>  |  |                     |                     |                      |                  |                                  |
| <b>Kings River</b>  |  |                     |                     |                      |                  |                                  |
| North Fork Kings River near Cliff Camp (3)                | 239                                      | 565                 | 50                  | 170                  | 71%              |                                  |
| Total Inflow to Pine Flat Reservoir                       | 1,183                                    | 3,114               | 273                 | <b>880</b>           | 74%              | 580 - 1,360                      |
| <b>Kaweah River at Terminus Reservoir</b>                 |  |                     |                     |                      |                  |                                  |
|   | 276                                      | 814                 | 61                  | <b>180</b>           | 65%              | 100 - 330                        |
| <b>Tule River at Success Reservoir</b>                    |  |                     |                     |                      |                  |                                  |
|   | 59                                       | 259                 | 2                   | <b>45</b>            | 76%              | 25 - 90                          |
| <b>Kern River</b>   |  |                     |                     |                      |                  |                                  |
| Kern River near Kernville (3)                             | 373                                      | 1,203               | 83                  | 270                  | 72%              |                                  |
| Total Inflow to Isabella Reservoir                        | 442                                      | 1,657               | 84                  | <b>310</b>           | 70%              | 180 - 550                        |

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1946-1995 unless otherwise not

(3) 50 year average based on years 1941-9

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-7

(6) 45 year average based on years 1936-8

**MARCH 1, 1999 FORECASTS**  
**WATER YEAR UNIMPAIRED RUNOFF**

| HISTORICAL          |                     |                     | Unimpaired Runoff in 1,000 Acre-Feet (1) |          |       |       |     |     |     |                 | FORECAST                   |                  |                                  |
|---------------------|---------------------|---------------------|--|----------|-------|-------|-----|-----|-----|-----------------|----------------------------|------------------|----------------------------------|
| 50 Yr<br>Avg<br>(2) | Max<br>of<br>Record | Min<br>of<br>Record | Oct<br>Thru<br>Jan*                      | Feb<br>* | Mar   | Apr   | May | Jun | Jul | Aug<br>&<br>Sep | Water<br>Year<br>Forecasts | Pct<br>of<br>Avg | 80 %<br>Probability<br>Range (1) |
| 856                 | 1,964               | 165                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,184               | 2,353               | 577                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 3,078               | 5,647               | 1,484               |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 5,896               | 10,796              | 2,479               | 2,315                                    | 1,170    | 1,100 | 1,000 | 700 | 400 | 280 | 485             | <b>7,450</b>               | 126%             | 6,610 - 8,770                    |
| 8,518               | 17,180              | 3,294               | 3,030                                    | 1,740    | 1,570 | 1,320 | 920 | 510 | 350 | 600             | <b>10,040</b>              | 118%             | 8,770 - 12,030                   |
| 780                 | 1,269               | 366                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 2,417               | 4,400               | 666                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 219                 | 637                 | 24                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 291                 | 562                 | 32                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 4,526               | 9,492               | 994                 | 1,450                                    | 940      | 860   | 890   | 800 | 380 | 170 | 200             | <b>5,690</b>               | 126%             | 4,950 - 7,100                    |
| 564                 | 1,056               | 102                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 181                 | 292                 | 30                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 379                 | 565                 | 98                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 2,337               | 4,926               | 369                 | 695                                      | 505      | 440   | 470   | 510 | 280 | 60  | 50              | <b>3,010</b>               | 129%             | 2,560 - 3,760                    |
| 616                 | 1,234               | 66                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,070               | 2,575               | 144                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 318                 | 705                 | 59                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 2,674               | 6,381               | 349                 | 620                                      | 705      | 545   | 580   | 650 | 390 | 100 | 40              | <b>3,630</b>               | 136%             | 3,060 - 4,590                    |
| 378                 | 1,253               | 20                  | 83                                       | 159      | 96    | 75    | 45  | 17  | 3   | 2               | <b>480</b>                 | 127%             | 390 - 650                        |
| 626                 | 1,009               | 197                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 736                 | 1,800               | 129                 | 115                                      | 120      | 115   | 150   | 230 | 170 | 30  | 10              | <b>940</b>                 | 128%             | 780 - 1,210                      |
| 471                 | 929                 | 88                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,131               | 2,952               | 155                 | 185                                      | 200      | 175   | 230   | 340 | 220 | 60  | 20              | <b>1,430</b>               | 126%             | 1,180 - 1,840                    |
| 461                 | 1,147               | 123                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 770                 | 1,661               | 258                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,857               | 4,430               | 383                 | 270                                      | 255      | 235   | 320   | 520 | 420 | 100 | 30              | <b>2,150</b>               | 116%             | 1,800 - 2,750                    |
| 461                 | 1,020               | 92                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 952                 | 2,859               | 150                 | 110                                      | 110      | 105   | 160   | 260 | 170 | 40  | 15              | <b>970</b>                 | 102%             | 760 - 1,330                      |
| 1,337               | 2,964               | 308                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 112                 | 298                 | 14                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 248                 | 653                 | 71                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,753               | 4,642               | 362                 | 195                                      | 110      | 135   | 230   | 400 | 320 | 110 | 50              | <b>1,550</b>               | 88%              | 1,200 - 2,170                    |
| 284                 | 607                 | 58                  |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 1,647               | 4,294               | 383                 | 155                                      | 75       | 100   | 190   | 350 | 250 | 90  | 40              | <b>1,250</b>               | 76%              | 890 - 1,820                      |
| 431                 | 1,402               | 92                  | 50                                       | 25       | 35    | 50    | 75  | 45  | 10  | 5               | <b>295</b>                 | 68%              | 190 - 480                        |
| 135                 | 615                 | 16                  | 36                                       | 16       | 17    | 20    | 16  | 7   | 2   | 1               | <b>115</b>                 | 85%              | 85 - 180                         |
| 558                 | 1,577               | 163                 |  |          |       |       |     |     |     |                 |                            |                  |                                  |
| 694                 | 2,309               | 175                 | 130                                      | 35       | 45    | 80    | 100 | 90  | 40  | 30              | <b>550</b>                 | 79%              | 380 - 850                        |

\* Indicates observed runoff

**MARCH 1, 1999 FORECASTS**  
**APRIL-JULY UNIMPAIRED RUNOFF**

| HYDROLOGIC REGION<br>and Watershed               | Unimpaired Runoff in 1,000 Acre-Feet (1) |                     |                     |                      |                  |
|--|--|---------------------|---------------------|----------------------|------------------|
|  | HISTORICAL                               |                     |                     | FORECAST             |                  |
|  | 50 Yr<br>Avg<br>(2)                      | Max<br>of<br>Record | Min<br>of<br>Record | Apr-Jul<br>Forecasts | Pct<br>of<br>Avg |
| <b>NORTH COAST</b>                               |  |                     |                     |                      |                  |
| <b>Trinity River</b>                             |  |                     |                     |                      |                  |
| Total Inflow to Lewiston Lake                    | 642                                      | 1,593               | 80                  | <b>810</b>           | 126%             |
| <b>Scott River</b>                               |  |                     |                     |                      |                  |
| Near Fort Jones                                  | 200                                      | n/a                 | n/a                 | <b>280</b>           | 140%             |
| <b>Klamath River</b>                             |  |                     |                     |                      |                  |
| Total inflow to Upper Klamath Lake (3)           | 509                                      | 758                 | 280                 | <b>880</b>           | 173%             |
| <b>NORTH LAHONTAN</b>                            |  |                     |                     |                      |                  |
| <b>Truckee River</b>                             |  |                     |                     |                      |                  |
| Lake Tahoe to Farad accretions                   | 264                                      | 713                 | 58                  | <b>370</b>           | 140%             |
| Lake Tahoe Rise (assuming gates closed, in feet) | 1.4                                      | 3.6                 | 0.2                 | <b>2.0</b>           | 143%             |
| <b>Carson River</b>                              |  |                     |                     |                      |                  |
| West Fork at Woodfords                           | 54                                       | 135                 | 12                  | <b>75</b>            | 139%             |
| East Fork near Gardnerville                      | 183                                      | 407                 | 43                  | <b>230</b>           | 126%             |
| <b>Walker River</b>                              |  |                     |                     |                      |                  |
| West Fork near Coleville                         | 143                                      | 330                 | 35                  | <b>170</b>           | 119%             |
| East Fork near Bridgeport                        | 61                                       | 209                 | 7                   | <b>75</b>            | 123%             |
| <b>SOUTH LAHONTAN</b>                            |  |                     |                     |                      |                  |
| <b>Owens River</b>                               |  |                     |                     |                      |                  |
| Total tributary flow to Owens River (4)          | 226                                      | 579                 | 96                  | <b>231</b>           | 102%             |

(1) See inside back cover for definition

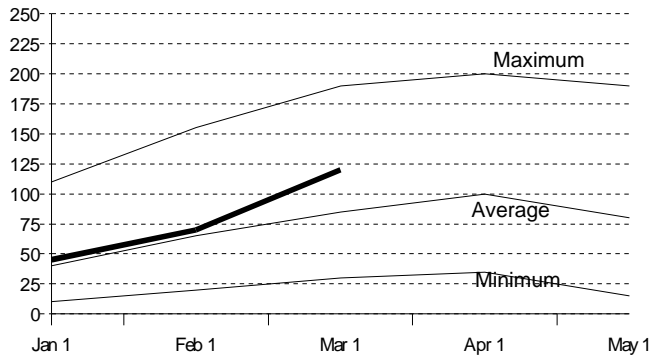
(2) All 50 year averages are based on years 1946-1995 unless otherwise not

(3) Forecast by U.S. Natural Resources Conservation Service, Portland Oregon, 30 year average based on years 1961-1995  
 April through September forecast

(4) Forecast by Department of Water and Power, City of Los Angeles

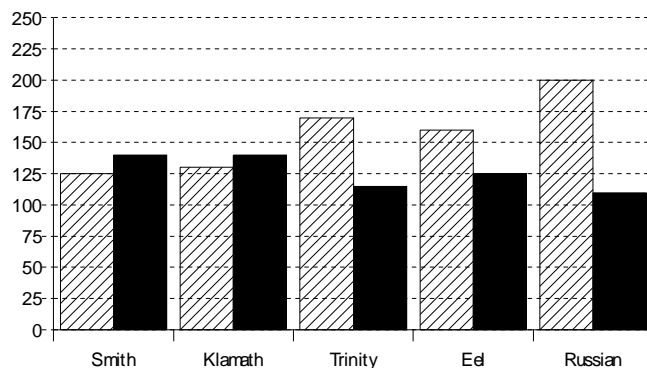
## Snowpack Accumulation

Water Content in % of April 1 Average



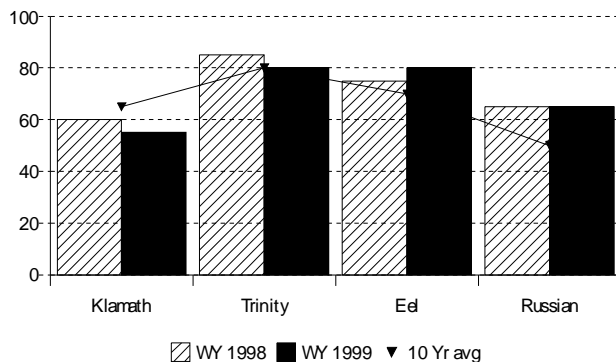
## Precipitation

October 1 to date in % of Average



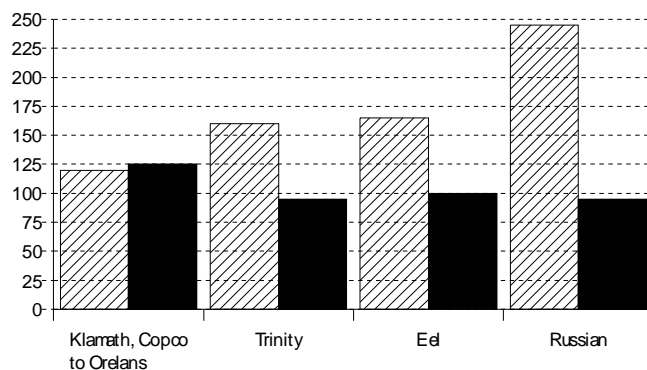
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## NORTH COAST REGION

**SNOWPACK**– First of the month measurements made at 12 snow courses indicate an area wide snow water equivalent of 35.5 inches. This is 140 percent of the March 1 average and 120 percent of the seasonal (April 1) average. Last year at this time the pack was holding 52.9 inches of water.

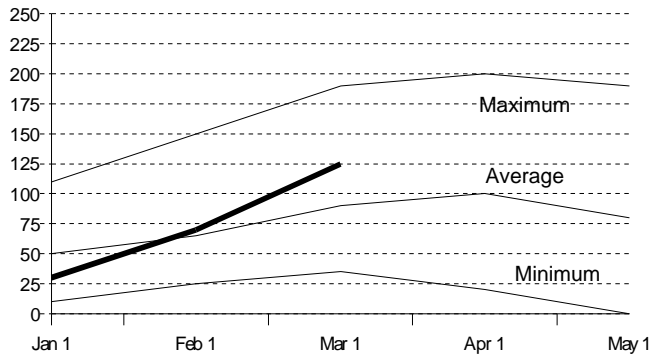
**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on this area was 125 percent of normal. Precipitation last month was about 225 percent of the monthly average. Seasonal precipitation at this time last year stood at 155 percent of normal.

**RESERVOIR STORAGE**– First of the month storage in 7 reservoirs was 2.5 million acre–feet which is 110 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

**RUNOFF** –Seasonal runoff of streams draining the area totaled 8 million acre–feet which is 110 percent of the average for this period. Last year, runoff for the same period was 155 percent of average.

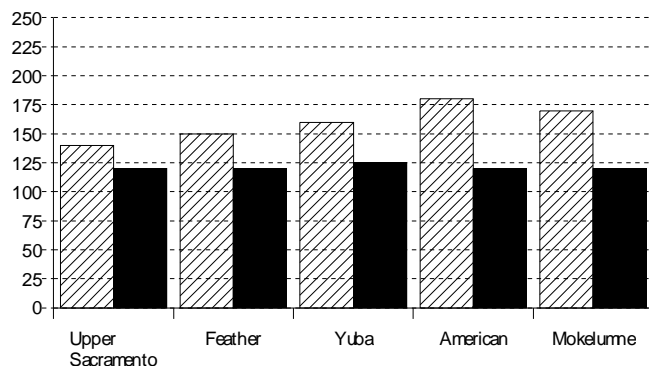
## Snowpack Accumulation

Water Content in % of April 1 Average



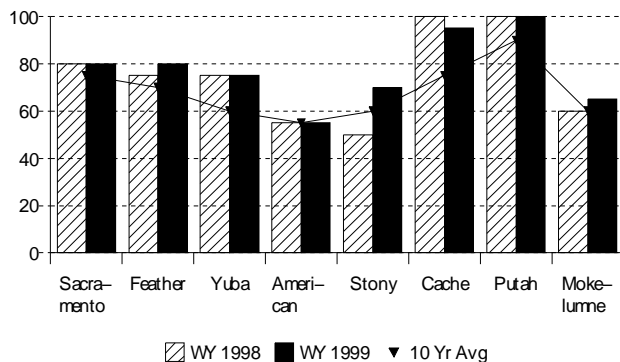
## Precipitation

October 1 to date in % of Average



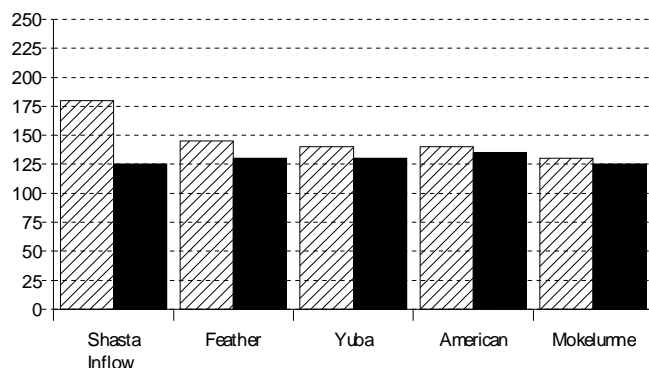
## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## SACRAMENTO RIVER REGION

**SNOWPACK**– First of the month measurements made at 67 snow courses indicate an area wide snow water equivalent of 38.1 inches. This is 145 percent of the March 1 average and 125 percent of the seasonal (April 1) average. Last year at this time the pack was holding 45.9 inches of water.

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on this area was 115 percent of normal. Precipitation last month was about 180 percent of the monthly average. Seasonal precipitation at this time last year stood at 165 percent of normal.

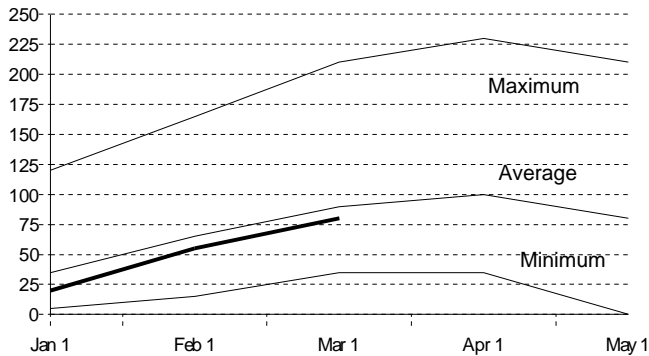
**RESERVOIR STORAGE**– First of the month storage in 43 reservoirs was 12.7 million acre–feet which is 110 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average.

**RUNOFF** – Seasonal runoff of streams draining the are totaled 9.7 million acre–feet which is 120 percent of average for this period. Last year, runoff for the same period was 165 percent of average.

The **Sacramento Region 40–30–30 Water Supply Index** is forecast to be 10.3 assuming median meteorological conditions for the remainder of the year. This classifies the year as "wet" in the Sacramento Valley according to the State Water Resources Control Board

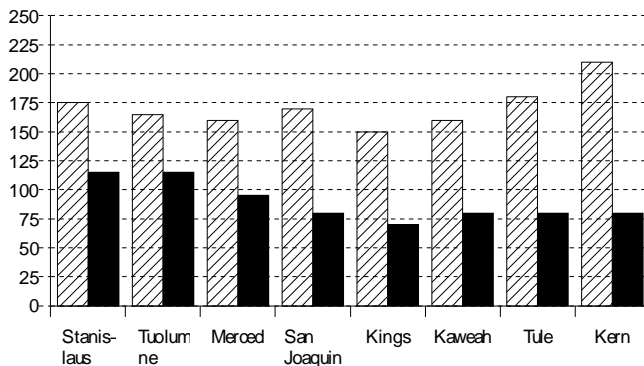
## Snowpack Accumulation

### Water Content in % of April 1 Average



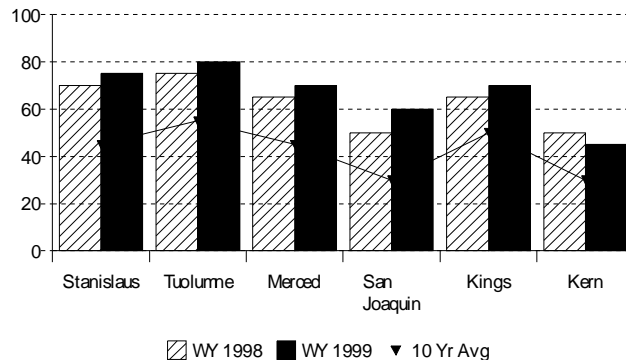
### Precipitation

#### October 1 to date in % of Average



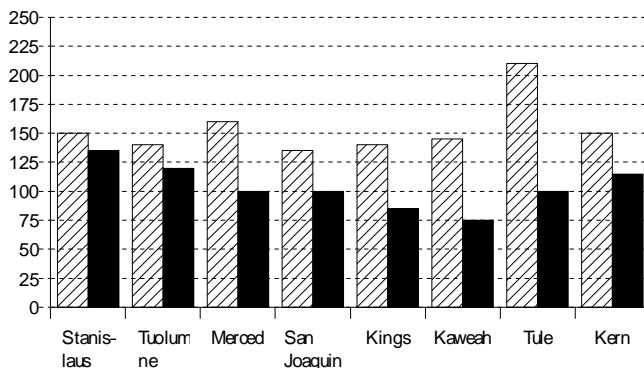
### Reservoir Storage

#### Contents of major reservoirs in % of capacity



### Runoff

#### October 1 to date in % of average



## SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

**SNOWPACK**– First of the month measurements made at 64 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 32.3 inches. This is 125 percent of the March 1 average and 105 percent of seasonal (April 1) average. Last year at this time the pack was holding 46.4 inches of water.

At the same time 36 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 14.6 inches which is 70 percent of the average for March 1 and 60 percent of the seasonal average. Last year at this time the basin was holding 40.1 inches of water.

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 100 percent of normal. Precipitation last month was about 145 percent of the monthly average. Seasonal precipitation at this time last year stood at 170 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 80 percent of normal. Precipitation last month was about 55 percent of the monthly average. Seasonal precipitation at this time last year stood at 180 percent of normal.

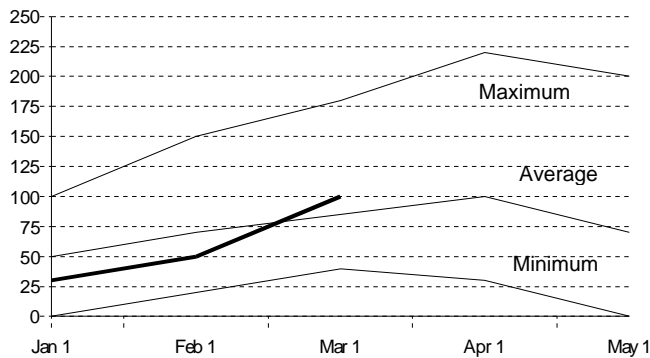
**RESERVOIR STORAGE**– First of the month storage in 33 **San Joaquin Region** reservoirs was 8.7 million acre-feet which is 130 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 125 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 1.1 million acre-feet which is 140 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 150 percent of average.

**RUNOFF**– Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.9 million acre-feet which is 120 percent of average for this period. Last year, runoff for the same period was 145 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 530 thousand acre-feet which is 95 percent of average for this period. Last year runoff for this same period was 140 percent of average.

The **San Joaquin Region 60–20–20 Water Supply Index** is forecast to be 3.7 assuming median meteorological conditions. This classifies the year as "above normal" in the San Joaquin Region according to the State Water Resources Control Board.

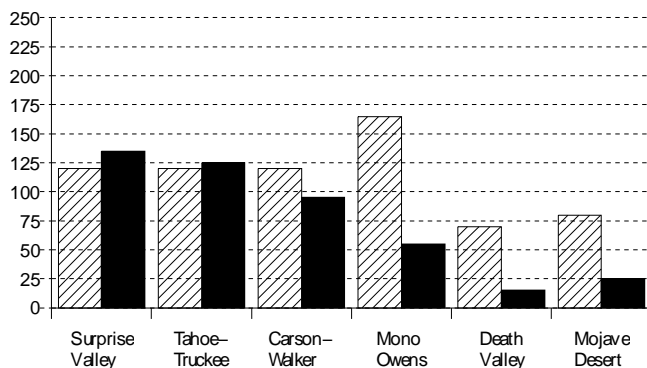
## Snowpack Accumulation

### Water Content in % of April 1 Average



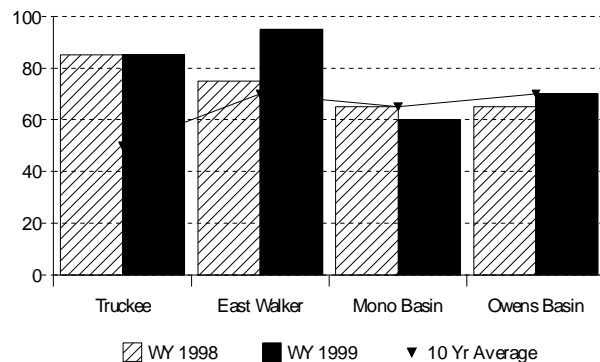
### Precipitation

#### October 1 to date in % of Average



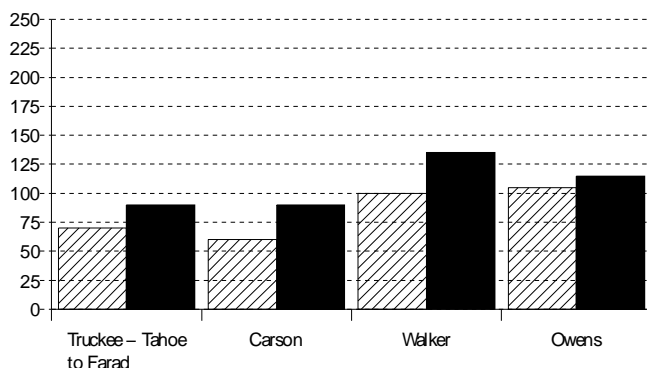
## Reservoir Storage

### Contents of major reservoirs in % of capacity



## Runoff

### October 1 to date in % of average



## NORTH AND SOUTH LAHONTAN REGIONS

**SNOWPACK**– First of the month measurements made at 11 **North Lahontan snow** courses indicate an area wide snow water equivalent of 33.7 inches. This is 140 percent of the March 1 average and 125 percent of seasonal (April 1) average. Last year at this time the pack was holding 36.1 inches of water. At the same time 19 **South Lahontan Region** snow courses indicated a basin-wide snow water equivalent of 17.3 inches which is 95 percent of the average for March 1 and 80 percent of the seasonal average. Last year at this time the basin was holding 28.5 inches of water.

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan** was 120 percent of normal. Precipitation last month was about 185 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal. Seasonal precipitation on the **South Lahontan** was 30 percent of normal. Precipitation last month was about 30 percent of the monthly average. Seasonal precipitation at this time last year stood at 180 percent of normal.

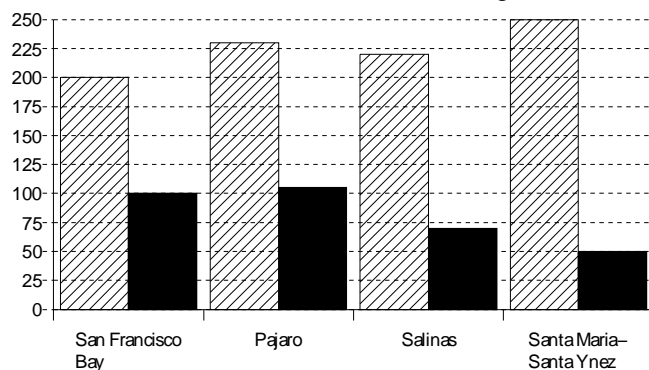
**RESERVOIR STORAGE**– First of the month storage in 5 **North Lahontan** reservoirs was 908 thousand acre-feet which is 155 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 145 percent of average. Lake Tahoe was 5.1 feet above its natural rim on March 1. First of the month storage in 8 **South Lahontan** reservoirs was 280 thousand acre-feet which is 100 percent of average and about 70 percent of available capacity. Storage in these reservoirs at this time last year was 100 percent of average.

**RUNOFF**– Seasonal runoff of streams draining the **North Lahontan Region** totaled 201 thousand acre-feet which is 100 percent of average for this period. Last year, runoff for the same period was 75 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 63 thousand acre-feet which is 115 percent of average for this period. Last year runoff for this same period was 105 percent of average.



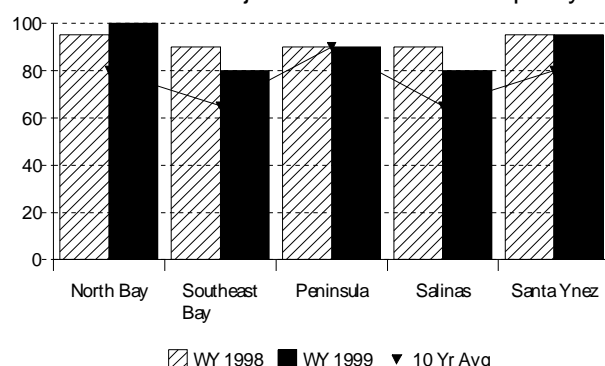
## Precipitation

October 1 to date in % of Average



## Reservoir Storage

Contents of major reservoirs in % of capacity



## Runoff

October 1 to date in % of average



## SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

**PRECIPITATION** – Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 100 percent of normal. Precipitation last month was about 170 percent of the monthly average. Seasonal precipitation at this time last year stood at 200 percent of normal. Seasonal precipitation on the **Central Coast Region** was 75 percent of normal. Precipitation last month was about 90 percent of the monthly average. Seasonal precipitation at this time last year stood at 240 percent of normal.

**RESERVOIR STORAGE**– First of the month storage in 18 **San Francisco Bay Region** reservoirs was 598 thousand acre–feet which is 120 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 130 percent of average. First of the month storage in 6 **Central Coast Region** reservoirs was 823 thousand acre–feet which is 130 percent of average and about 85 percent of available capacity. Storage in these reservoirs at this time last year was 135 percent of average.

**RUNOFF**– Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 54 thousand acre–feet which is 110 percent of average for this period. Last year, runoff for the same period was 210 percent of average. Seasonal runoff of streams draining the **Central Coast Region** totaled 88 thousand acre–feet which is 45 percent of average for this period. Last year runoff for this same period was 280 percent of average.

## **SOUTH COAST AND COLORADO RIVER REGIONS**

**PRECIPITATION** – October through January (seasonal) precipitation on the **South Coast Region** was 45 percent of normal. February precipitation was 30 percent of the monthly average. Seasonal precipitation at this time last year was 195 percent of normal. Seasonal precipitation on the **Colorado River–Desert Region** was 30 percent of normal. Seasonal precipitation on the **Colorado River–Desert Region** was 30 percent of normal. Precipitation in February was 80 percent of average.

**RESERVOIR STORAGE** – March 1 storage in 29 major **South Coast Region** reservoirs was 1.5 million acre–feet or 120 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 130 percent of average. On March 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 48 million acre–feet or about 128 percent of average. About 90 percent of available capacity was in use. Last year at this time, these reservoirs were storing 127 percent of average.

**RUNOFF** – Seasonal runoff from selected **South Coast Region** streams totaled 16 thousand acre–feet which is 50 percent of average. Runoff from these streams during February totaled 3.8 thousand acre–feet or 30 percent of average. Seasonal runoff from these streams last year was 150 percent of average.

**COLORADO RIVER** – The April –July inflow to Lake Powell is forecast to be 6.5 million acre–feet, which is 84 percent of average. Last months bulletin incorrectly reported April –July inflow at 11 million acre–feet. The correct value was 6.7 million acre–feet which was 87 percent of the average. The March 1 snowpack in the Upper Colorado River basin was 92 percent of average, highest in the Green at 109 percent and lowest in the Animas at 74 percent.

## **CENTRAL VALLEY PROJECT**

Based on March 1 conditions, Bureau of Reclamation Water Year forecasts for unimpaired runoff to CVP reservoirs are: Trinity—1.56 MAF (129% of average), Shasta—7.6 MAF (137% of average), American—3.63 MAF (137% of average), Stanislaus—1.43 MAF (125% of average), and San Joaquin above Friant—1.55 MAF (87% of average).

April–July forecasts for unimpaired runoff are: Trinity—.84 MAF (139% of average), Shasta—2.38 MAF (137% of average), American—1.72 MAF (135% of average), Stanislaus—.85 MAF (116% of average), and San Joaquin above Friant—1.06 MAF (83% of average).

As of February 28, 1999 CVP storage was 9.1 million acre feet which is 0.1 million acre feet greater than storage of one year ago, and is approximately 124% of normal for that date.

The Bureau of Reclamation last updated water allocations for the CVP contractors on February 16, 1999. Based on conservative water supply forecasts prepared from information available February 1, 1999 CVP water allocations were: Agricultural contractors–70%; Urban contractors–95%; Sacramento River water rights and San Joaquin Exchange Contractors– 100%; Wildlife Refuges–100%; Stanislaus River contractors–55 thousand acre–feet; Friant contractors– 75% Class I, 0% Class II.

## **STATE WATER PROJECT**

State Water Project deliveries have been approved at about 2.44 million acre–feet based on water supply conditions as of mid–February which meets at least 60% of most contractors' entitlement. This approval considered several factors, including the existing storage in SWP reservoirs, a conservative projection of hydrology and water supply expected to develop during the remainder of the 1999–00 water year, SWP operational constraints, and 1999 contractor demands. Approvals are being evaluated with the March 1 hydrologic conditions which will likely increase the allocations.

# MAJOR WATER DISTRIBUTION PROJECTS

## RESERVOIR STORAGE

(AVERAGES BASED ON PERIOD RECORD)

| RESERVOIR                           | CAPACITY<br>1,000 AF | AVERAGE<br>STORAGE<br>1,000 AF | STORAGE AT END OF FEBRUARY |                  |                    |                     |
|-------------------------------------|----------------------|--------------------------------|----------------------------|------------------|--------------------|---------------------|
|                                     |                      |                                | 1998<br>1,000 AF           | 1999<br>1,000 AF | PERCENT<br>AVERAGE | PERCENT<br>CAPACITY |
| STATE WATER PROJECT                 |                      |                                |                            |                  |                    |                     |
| Lake Oroville                       | 3,538                | 2,588                          | 2,714                      | 2,791            | 108%               | 79%                 |
| San Luis Reservoir (SWP)            | 1,062                | 939                            | 1,062                      | 1,097            | 117%               | 103%                |
| Lake Del Valle                      | 77                   | 33                             | 38                         | 35               | 106%               | 45%                 |
| Lake Silverwood                     | 73                   | 66                             | 70                         | 59               | 88%                | 80%                 |
| Pyramid Lake                        | 171                  | 162                            | 169                        | 161              | 100%               | 94%                 |
| Castaic Lake                        | 324                  | 268                            | 319                        | 228              | 85%                | 71%                 |
| Perris Lake                         | 132                  | 115                            | 110                        | 123              | 107%               | 94%                 |
| CENTRAL VALLEY PROJECT              |                      |                                |                            |                  |                    |                     |
| Clair Engle Lake                    | 2,448                | 1,897                          | 1,977                      | 2,006            | 106%               | 82%                 |
| Lake Shasta                         | 4,552                | 3,377                          | 3,567                      | 3,713            | 110%               | 82%                 |
| Whiskeytown Lake                    | 241                  | 208                            | 220                        | 205              | 99%                | 85%                 |
| Folsom Lake                         | 977                  | 579                            | 559                        | 496              | 86%                | 51%                 |
| New Melones Reservoir               | 2,420                | 1,491                          | 1,955                      | 1,972            | 132%               | 82%                 |
| Millerton Lake                      | 520                  | 306                            | 366                        | 428              | 140%               | 82%                 |
| San Luis Reservoir (CVP)            | 971                  | 788                            | 963                        | 888              | 113%               | 91%                 |
| COLORADO RIVER PROJECT              |                      |                                |                            |                  |                    |                     |
| Lake Mead                           | 26,159               | 20,023                         | 25,014                     | 24,899           | 124%               | 95%                 |
| Lake Powell                         | 25,002               | 15,410                         | 20,630                     | 21,088           | 137%               | 84%                 |
| Lake Mohave                         | 1,810                | 1,641                          | 1,657                      | 1,677            | 102%               | 93%                 |
| Lake Havasu                         | 619                  | 537                            | 574                        | 521              | 97%                | 84%                 |
| EAST BAY MUNICIPAL UTILITY DISTRICT |                      |                                |                            |                  |                    |                     |
| Pardee Reservoir                    | 198                  | 177                            | 163                        | 199              | 112%               | 100%                |
| Camanche Reservoir                  | 417                  | 251                            | 298                        | 284              | 113%               | 68%                 |
| East Bay (4 res.)                   | 151                  | 129                            | 151                        | 137              | 106%               | 91%                 |
| CITY AND COUNTY OF SAN FRANCISCO    |                      |                                |                            |                  |                    |                     |
| Hetch-Hetchy Reservoir              | 360                  | 131                            | 156                        | 258              | 197%               | 72%                 |
| Cherry Lake                         | 268                  | 103                            | 150                        | 224              | 218%               | 84%                 |
| Lake Eleanor                        | 26                   | 10                             | 5                          | 21               | 214%               | 80%                 |
| South Bay/Peninsula (4 res.)        | 225                  | 168                            | 213                        | 209              | 124%               | 93%                 |
| CITY OF LOS ANGELES (D.W.P.)        |                      |                                |                            |                  |                    |                     |
| Lake Crowley                        | 183                  | 129                            | 127                        | 136              | 105%               | 74%                 |
| Grant Lake                          | 48                   | 28                             | 40                         | 40               | 146%               | 85%                 |
| Other Aqueduct Storage (6 res.)     | 83                   | 75                             | 67                         | 59               | 79%                | 71%                 |

# TELEMETERED SNOW WATER EQUIVALENTS

MARCH 1, 1999

(AVERAGES BASED ON PERIOD RECORD)

|                               |       | INCHES OF WATER EQUIVALENT |      |                  |          |          |
|-------------------------------|-------|----------------------------|------|------------------|----------|----------|
| BASIN NAME                    |       | APRIL 1                    |      | PERCENT          | 24 HRS   | 1 WEEK   |
| STATION NAME                  | ELEV  | AVERAGE                    |      | MAR 1 OF AVERAGE | PREVIOUS | PREVIOUS |
| TRINITY RIVER                 |       |                            |      |                  |          |          |
| Peterson Flat                 | 7150' | 29.2                       | 35.0 | 120%             | 34.6     | 31.6     |
| Red Rock Mountain             | 6700' | 39.6                       | 49.6 | 125%             | 49.6     | 45.1     |
| Bonanza King                  | 6450' | 40.5                       | 36.6 | 90%              | 35.9     | 31.4     |
| Shimmy Lake                   | 6200' | 40.3                       | 48.8 | 121%             | 48.8     | 44.7     |
| Middle Boulder 3              | 6200' | 28.3                       | —    | —                | —        | —        |
| Highland Lakes                | 6030' | 29.9                       | 38.4 | 128%             | 38.4     | 31.9     |
| Scott Mountain                | 5900' | 16.0                       | 22.4 | 140%             | 22.0     | 19.6     |
| Mumbo Basin                   | 5700' | 22.4                       | 35.0 | 156%             | 35.0     | 31.0     |
| Big Flat                      | 5100' | 15.8                       | 23.7 | 150%             | 23.7     | 21.4     |
| SACRAMENTO RIVER              |       |                            |      |                  |          |          |
| Cedar Pass                    | 7100' | 18.1                       | 24.0 | 133%             | 23.8     | 22.5     |
| Blacks Mountain               | 7100' | 12.7                       | 16.6 | 130%             | 16.4     | 15.5     |
| Sand Flat                     | 6750' | 42.4                       | 38.0 | 90%              | 37.3     | 34.1     |
| Medicine Lake                 | 6700' | 32.6                       | 43.7 | 134%             | 42.8     | 40.0     |
| Adin Mountain                 | 6350' | 13.6                       | 17.7 | 130%             | 17.4     | 15.3     |
| Snow Mountain                 | 5950' | 27.0                       | 53.0 | 196%             | 53.0     | 49.7     |
| Slate Creek                   | 5600' | 29.0                       | 29.4 | 101%             | 29.4     | 25.9     |
| Stouts Meadow                 | 5400' | 36.0                       | 41.5 | 115%             | 41.5     | 37.8     |
| FEATHER RIVER                 |       |                            |      |                  |          |          |
| Kettle Rock                   | 7300' | 25.5                       | 41.9 | 164%             | 41.3     | 38.9     |
| Grizzly Ridge                 | 6900' | 29.7                       | 38.6 | 130%             | 37.8     | 35.4     |
| Pilot Peak (DWR)              | 6800' | 52.6                       | 53.5 | 102%             | 52.6     | 47.3     |
| Gold Lake                     | 6750' | 36.5                       | 54.0 | 148%             | 53.4     | 50.8     |
| Humbug                        | 6500' | 28.0                       | 44.2 | 158%             | 44.2     | 42.4     |
| Rattlesnake                   | 6100' | 14.0                       | 26.6 | 190%             | 26.9     | 25.8     |
| Bucks Lake                    | 5750' | 44.7                       | 44.6 | 100%             | 44.6     | 42.4     |
| Four Trees                    | 5150' | 20.0                       | 18.4 | 92%              | 18.4     | 16.0     |
| EEL RIVER                     |       |                            |      |                  |          |          |
| Noel Spring                   | 5100' | —                          | 5.3  | —                | 5.4      | 4.1      |
| Plaskett Meadows              | 6000' | —                          | —    | —                | —        | —        |
| YUBA & AMERICAN RIVERS        |       |                            |      |                  |          |          |
| Lake Lois                     | 8800' | 39.5                       | —    | —                | —        | —        |
| Schneiders                    | 8750' | 34.5                       | 50.9 | 147%             | 50.4     | 48.8     |
| Caples Lake (DWR)             | 7800' | 30.9                       | 36.2 | 117%             | 36.2     | 35.4     |
| Alpha (Smud)                  | 7600' | 35.9                       | 46.2 | 129%             | 46.1     | 44.8     |
| Beta                          | 7600' | 35.9                       | 45.4 | 126%             | 44.9     | 43.2     |
| Meadow Lake                   | 7200' | 55.5                       | 71.2 | 128%             | 69.2     | 66.0     |
| Silver Lake (DWR)             | 7100' | 22.7                       | 33.7 | 149%             | 33.4     | 30.8     |
| Central Sierra Snow Lab       | 6950' | 33.6                       | 50.8 | 151%             | 50.8     | 47.8     |
| Huysink                       | 6600' | 42.6                       | 42.5 | 100%             | 42.5     | 40.8     |
| Van Vleck                     | 6700' | 35.9                       | 53.3 | 148%             | 53.3     | 51.5     |
| Robbs Saddle                  | 5900' | 21.4                       | 27.0 | 126%             | 27.0     | 26.0     |
| Greek Store                   | 5600' | 21.0                       | 25.9 | 123%             | 25.9     | 24.5     |
| Blue Canyon                   | 5280' | 9.0                        | 7.7  | 86%              | 7.7      | 7.6      |
| Robbs Powerhouse              | 5150' | 5.2                        | 26.0 | 500%             | 26.0     | 25.9     |
| MOKELUMNE & STANISLAUS RIVERS |       |                            |      |                  |          |          |
| Deadman Creek                 | 9250' | 37.2                       | 27.6 | 74%              | 27.6     | 26.6     |
| Highland Meadow               | 8800' | 47.9                       | 43.8 | 91%              | 43.8     | 42.6     |
| Gianelli Meadow               | 8350' | 55.5                       | 44.3 | 80%              | 44.3     | 43.1     |
| Lower Relief Valley           | 8100' | 41.2                       | 42.3 | 103%             | 42.3     | 41.0     |
| Blue Lakes                    | 8000' | 33.1                       | 31.4 | 95%              | 31.0     | 29.9     |
| Mud Lake                      | 7900' | 44.9                       | 57.0 | 127%             | 56.8     | 55.1     |
| Stanislaus Meadow             | 7750' | 47.5                       | 48.8 | 103%             | 48.8     | 47.4     |
| Bloods Creek                  | 7200' | 35.5                       | 32.6 | 92%              | 32.6     | 32.0     |
| Black Springs                 | 6500' | 32.0                       | 29.2 | 91%              | 29.2     | 26.8     |
| TUOLUMNE & MERCED RIVERS      |       |                            |      |                  |          |          |
| Dana Meadows                  | 9800' | 27.7                       | 26.1 | 94%              | 26.1     | 26.1     |
| Slide Canyon                  | 9200' | 41.1                       | 40.6 | 99%              | 40.6     | 39.9     |
| Snow Flat                     | 8700' | 44.1                       | —    | —                | —        | —        |
| Tuolumne Meadows              | 8600' | 22.6                       | 21.7 | 96%              | 21.7     | 21.0     |
| Horse Meadow                  | 8400' | 48.6                       | 45.2 | 93%              | 45.2     | 43.2     |
| Ostrander Lake                | 8200' | 34.8                       | 32.3 | 93%              | 32.3     | 31.0     |
| Paradise Meadow               | 7650' | 41.3                       | 41.6 | 101%             | 41.6     | 40.3     |
| Gin Flat                      | 7050' | 34.2                       | 24.1 | 70%              | 24.1     | 23.2     |
| Lower Kibbie Ridge            | 6600' | 27.4                       | 24.7 | 90%              | 24.7     | 24.1     |

# TELEMETERED SNOW WATER EQUIVALENTS

MARCH 1, 1999

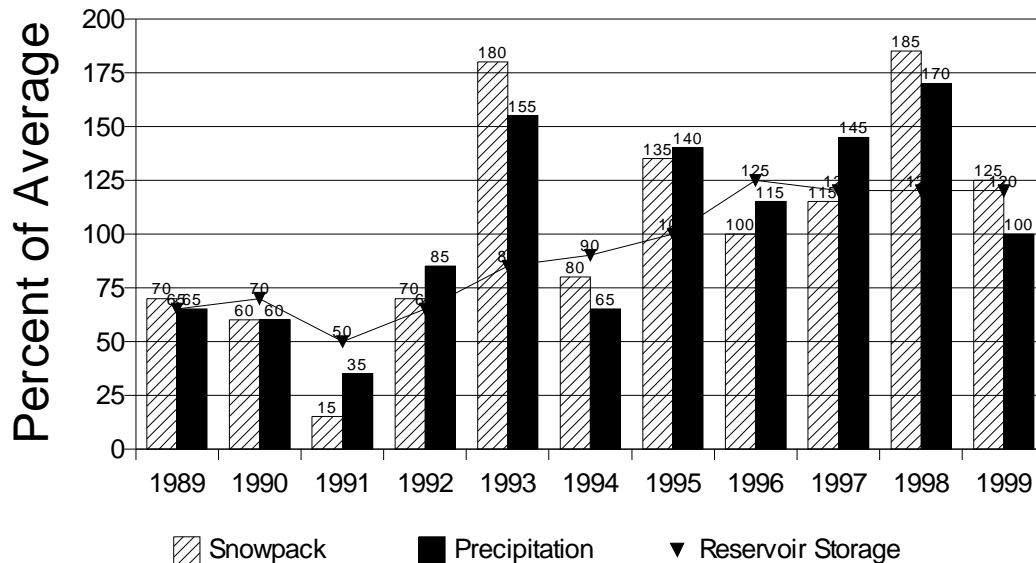
(AVERAGES BASED ON PERIOD RECORD)

|                          |        | INCHES OF WATER EQUIVALENT |      |                  |          |          |
|--------------------------|--------|----------------------------|------|------------------|----------|----------|
| BASIN NAME               |        | APRIL 1                    |      | PERCENT          | 24 HRS   | 1 WEEK   |
| STATION NAME             | ELEV   | AVERAGE                    |      | MAR 1 OF AVERAGE | PREVIOUS | PREVIOUS |
| SAN JOAQUIN RIVER        |        |                            |      |                  |          |          |
| Volcanic Knob            | 10100' | 30.1                       | 22.2 | 74%              | 22.2     | 22.2     |
| Agnew Pass               | 9450'  | 32.3                       | 25.5 | 79%              | 25.5     | 25.5     |
| Kaiser Point             | 9200'  | 37.8                       | 22.7 | 60%              | 22.7     | 22.6     |
| Green Mountain           | 7900'  | 30.8                       | 23.2 | 75%              | 23.2     | 22.8     |
| Tamarack Summit          | 7600'  | 30.5                       | 19.7 | 65%              | 19.7     | 19.7     |
| Chilkoot Meadow          | 7150'  | 38.0                       | 27.8 | 73%              | 27.8     | 26.6     |
| Huntington Lake (USBR)   | 7000'  | 20.1                       | 16.8 | 84%              | 16.8     | 16.8     |
| Graveyard Meadow         | 6900'  | 18.8                       | 18.5 | 98%              | 18.5     | 18.1     |
| Poison Ridge             | 6900'  | 28.9                       | 18.2 | 63%              | 18.2     | 17.9     |
| KINGS RIVER              |        |                            |      |                  |          |          |
| Bishop Pass              | 11200' | 34.0                       | 16.1 | 47%              | 16.1     | 16.1     |
| Charlotte Lake           | 10400' | 27.5                       | 17.4 | 63%              | 17.4     | 17.1     |
| State Lakes              | 10400' | 29.0                       | 19.5 | 67%              | 19.5     | 19.0     |
| Mitchell Meadow          | 10375' | 32.9                       | 21.8 | 66%              | 21.8     | 21.5     |
| Blackcap Basin           | 10300' | 34.3                       | 20.9 | 61%              | 20.9     | 20.9     |
| Upper Burnt Corral       | 9700'  | 34.6                       | 26.1 | 76%              | 26.1     | 25.5     |
| West Woodchuck Meadow    | 9100'  | 32.8                       | —    | —                | —        | —        |
| Big Meadows (DWR)        | 7600'  | 25.9                       | —    | —                | —        | —        |
| KAWEAH & TULE RIVERS     |        |                            |      |                  |          |          |
| Quaking Aspen            | 7200'  | 21.0                       | 13.7 | 65%              | 14.0     | 14.0     |
| Giant Forest (Corps)     | 6400'  | 10.0                       | —    | —                | —        | —        |
| KERN RIVER               |        |                            |      |                  |          |          |
| Upper Tyndall Creek      | 11500' | 27.7                       | 11.4 | 41%              | 11.4     | 11.4     |
| Crabtree Meadow          | 10700' | 19.8                       | 6.8  | 34%              | 6.8      | 6.7      |
| Chagoopa Plateau         | 10300' | 21.8                       | 11.5 | 53%              | 11.5     | 11.5     |
| Pascoes                  | 9150'  | 24.9                       | 18.3 | 73%              | 18.3     | 17.9     |
| Tunnel Guard Station     | 8950'  | 15.6                       | 5.5  | 35%              | 5.5      | 5.5      |
| Wet Meadows              | 8900'  | 30.3                       | 13.3 | 44%              | 13.3     | 13.2     |
| Casa Vieja Meadows       | 8400'  | 20.9                       | 11.1 | 53%              | 11.1     | 11.1     |
| Beach Meadows            | 7650'  | 11.0                       | 5.4  | 49%              | 5.6      | 6.0      |
| SURPRISE VALLEY AREA     |        |                            |      |                  |          |          |
| Dismal Swamp             | 7050'  | 29.2                       | 35.5 | 122%             | 35.2     | 33.2     |
| TRUCKEE RIVER            |        |                            |      |                  |          |          |
| Mount Rose Ski Area      | 8850'  | 38.5                       | 47.1 | 122%             | 47.1     | 45.3     |
| Independence Lake (NRCS) | 8450'  | 41.4                       | 54.0 | 130%             | 53.9     | 51.4     |
| Big Meadows (NRCS)       | 8700'  | 25.7                       | 27.1 | 105%             | 27.1     | 25.7     |
| Independence Camp        | 7000'  | 21.8                       | 23.4 | 107%             | 23.4     | 21.9     |
| Independence Creek       | 6500'  | 12.7                       | 19.1 | 150%             | 19.0     | 17.9     |
| LAKE TAHOE BASIN         |        |                            |      |                  |          |          |
| Heavenly Valley          | 8800'  | 28.1                       | 34.5 | 123%             | 34.5     | 33.1     |
| Hagans Meadow            | 8000'  | 16.5                       | 25.2 | 153%             | 25.2     | 24.4     |
| Marlette Lake            | 8000'  | 21.1                       | 31.4 | 149%             | 31.4     | 29.7     |
| Echo Peak 5              | 7800'  | 39.5                       | 51.4 | 130%             | 51.4     | 49.8     |
| Rubicon Peak 2           | 7500'  | 29.1                       | 41.4 | 142%             | 41.0     | 39.1     |
| Ward Creek 3             | 6750'  | 39.4                       | 42.2 | 107%             | 42.2     | 40.7     |
| Fallen Leaf Lake         | 6300'  | 7.0                        | 10.7 | 153%             | 11.4     | 11.1     |
| CARSON RIVER             |        |                            |      |                  |          |          |
| Ebbetts Pass             | 8700'  | 38.8                       | 38.5 | 99%              | 38.5     | 37.7     |
| Poison Flat              | 7900'  | 16.2                       | 21.9 | 135%             | 21.9     | 21.9     |
| WALKER RIVER             |        |                            |      |                  |          |          |
| Virginia Lakes           | 9200'  | 20.3                       | 15.1 | 74%              | 15.1     | 14.7     |
| Lobdell Lake             | 9200'  | 17.3                       | 14.6 | 84%              | 14.6     | 14.1     |
| Sonora Pass Bridge       | 8750'  | 26.0                       | 25.7 | 99%              | 25.6     | 24.9     |
| Leavitt Meadows          | 7200'  | 8.0                        | 13.2 | 165%             | 13.0     | 12.6     |
| OWENS RIVER/MONO LAKE    |        |                            |      |                  |          |          |
| Gem Pass                 | 10750' | 31.7                       | 28.1 | 89%              | 28.1     | 28.1     |
| Sawmill                  | 10300' | 19.4                       | 12.4 | 64%              | 12.4     | 12.4     |
| Cottonwood Lakes         | 10200' | 11.6                       | 9.0  | 78%              | 9.0      | 9.0      |
| Big Pine Creek           | 9800'  | 17.9                       | 9.8  | 55%              | 9.8      | 9.1      |
| South Lake               | 9600'  | 16.0                       | 10.4 | 65%              | 10.4     | 10.3     |
| Mammoth Pass (USBR)      | 9500'  | 42.4                       | 31.3 | 74%              | 31.3     | 30.4     |
| Rock Creek Lakes         | 10000' | 14.0                       | 9.8  | 70%              | 9.8      | 9.8      |

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

| AREA                 | JANUARY | FEBRUARY | MARCH | APRIL | MAY |
|----------------------|---------|----------|-------|-------|-----|
| Central Valley North | 45%     | 70%      | 90%   | 100%  | 75% |
| Central Valley South | 45%     | 65%      | 85%   | 100%  | 80% |
| North Coast          | 40%     | 60%      | 85%   | 100%  | 80% |

# March 1 Statewide Conditions



## SNOWLINES

**DON'T MISS** the 1999 Western Snow Conference annual meeting. It will be held April 19–22 at South Lake Tahoe, CA. Expect further information in the mail. If you have not been receiving information regarding the Western Snow Conference contact Frank Gehrke at 916–574–2635 or [gridley@water.ca.gov](mailto:gridley@water.ca.gov). Information is available on the web at <http://snobear.colorado.edu/WSC/WSC.html>.

**DEPICTED** on this month's cover is Rick Livingston, owner–operator, pilot and chief mechanic of Intermountain Helicopter in Sonora does his part on a snow sensor rescue mission at Ostrander Lake in late May, 1998.

**BULLETIN 120** in pdf format is now available on the web. See <http://snow.water.ca.gov>.